HEAVY METAL™

LOADING INSTRUCTIONS

CBM 64/128 Cassette
Press **SHIFT** and **RUN/STOP** keys together. Press **PLAY** on the cassette deck then follow on screen prompts.

CBM 64/128 Disk
Type LOAD"**HEAVY METAL**",8,1, and press **RETURN**. For "BEACH HEAD", insert side 2 and type LOAD"*",8,1 and press **RETURN** then follow on-screen prompts.

Spectrum 48K Cassette
Type LOAD"" then press **ENTER**, then press **PLAY** on the cassette deck.

Spectrum +2, +3 Cassette
Press **ENTER** on the LOADER option, then press **PLAY** on the cassette deck.

Spectrum +3 Disk
Turn on the computer, insert disk and press **ENTER** on the LOADER option, then follow on-screen prompts.

Amstrad CPC Cassette
Press **CTRL** and small **ENTER** keys together. Press **PLAY** on the cassette deck. Follow screen prompts.

Amstrad CPC Disk
Type RUN"DISK and press **ENTER**, then follow on-screen prompts.

Atari ST
Insert the game disk and Switch on computer, the game will then load and run automatically.

CBM Amiga
Insert the game disk and Switch on computer, the game will then load and run automatically.

Cassette users please note
Beach Head is located towards the end of side 2 on the cassette. To load, fast forward the tape to a point approximately half way through, stop the tape and perform the loading procedure above.

TITLE AND DEMO SCREENS

The Title Screen (C64, ATST, Amiga versions only)
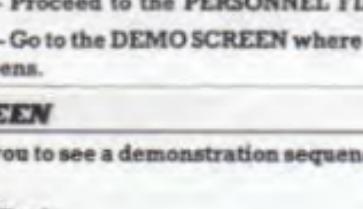
After you've turned the disk over, (C64 only) the next screen you'll see is called the TITLE SCREEN. From this level you can choose one of two options.

1. PLAY THE GAME – Proceed to the PERSONNEL FILE.

2. DEMONSTRATION – Go to the DEMO SCREEN where you can preview any of the 4 main action screens.

THE DEMO SCREEN

This screen will allow you to see a demonstration sequence of any of the main action screens.

MBT – Main Battle Tank
ADAT – Air Defence Anti-Tank System
FAV – Fast Attack Vehicle
TACC – Tactical Command Centre (C64 version only).

During the demonstration, pressing **SPACE BAR** will start the game by taking you directly to the PERSONNEL FILE. If you wait to see the entire demo, you will return to the DEMO SCREEN.

Selecting "Exit" will take you back to the TITLE SCREEN.

PLAYING THE GAME

The Personnel File
The PERSONNEL FILE summarises the names and ranks of all officers. If you are playing the game for the first time, use the "ADD NAME" function to add YOUR NAME to the list. (Select ADD NAME, type your name and hit the **RETURN** key).

Up to 10 names are allowed in the file, and a blank line must exist in order to enter a new name. If a blank line does not exist, use the "DELETE NAME" function to erase one of the existing names from the list.

Select the "CANCEL" function to return to the Title Screen.

AMSTRAD DISK USERS NOTE: Save personnel file and TACCOM game to side 'A' of the game disk. Tape versions can save to any tape, but the program has no facility for using user named files, i.e. it loads the first correct file it comes across.

The Player File
Each player has his or her own file which automatically maintains records of performance ratings, time in service and rank advancements. Every first time player must begin as a Cadet in Officer's Training School (OTS). A player will become a commissioned officer (2nd Lieutenant Rank) after qualifying on each of the three Combat Simulators. Qualifying is not difficult, but Cadets must demonstrate basic combat skills by scoring a minimum of 5,000 points on each simulator. C64 Users Note: A player cannot play the Tactical Command portion of the game until he has received his commission as a 2nd Lieutenant.

Advancements in Rank
Your rank is determined by your total advancement points which accumulate each time you play the game. Be sure to play each time under the same PLAYER NAME so that your points will accumulate properly.

RANK	TOTAL ADVANCEMENT POINTS
GENERAL (5 star)	86400 and up
GENERAL (4 star)	73800-86399
GENERAL (3 star)	62100-73799
GENERAL (2 star)	51300-62099
GENERAL (1 star)	41400-51299
COLONEL	32400-41399
LT. COLONEL	24300-32399
MAJOR	17100-24299
CAPTAIN	10800-17099
1st LIEUTENANT	5400-10799
2nd LIEUTENANT	0- 5399

Officer's Training School
If you have not yet qualified, you will automatically go to the OTS Screen, and then on to the COMBAT SIMULATION SCREEN.

If you have qualified, you will automatically move to the OPTION SCREEN (see Flow Chart) where you may choose to play the TACTICAL COMMAND portion of the game.

The OTS Screen
If the OTS (Officer's Training School) screen appears, it means that you are still a Cadet and have not yet received your commission. Only commissioned officers

(2nd Lieutenant rank or higher) have **TACTICAL COMMAND** status. Upon leaving this screen, you will go directly to the COMBAT SIMULATION screen, where you will have your chance to qualify. Once you have qualified on each of the three simulators, you will not return to the OTS screen.

COMBAT SIMULATION

The Combat Simulators are designed to test and improve your skills under simulated battlefield conditions.

Qualifying

Qualifying is accomplished by scoring a minimum of 5,000 points on each of the three COMBAT SIMULATORS. You may advance in rank as your performance and time in service warrant.

You can return to the COMBAT SIMULATORS at anytime to sharpen your combat skills or to compete against other officers for top scores. Your best and last scores on the simulators will be saved with your personal file. The best scores are considered when evaluations for promotion are done.

Operating the Combat Simulators

The combat simulators operate identically to their counterparts except that you have unlimited fuel and shells and a fixed number of units with which to fight. Once all of your units are destroyed, the simulation is over. Your performance is based entirely on the number of points scored during the simulation. Refer to the section on Operating Your Equipment for specific information on how to operate each piece of hardware.

PLAYING OPTIONS

The Option Screen

You will automatically come to the option screen if you have a rank of 2nd Lieutenant or higher.

This screen allows you to select either Tactical Command or Combat Simulation.

Combat Simulation is the same portion of the game you were required to play while you were a Cadet. It is now optional. You can use the Simulators to sharpen your skills on a specific piece of equipment. You can also compete against your friends on a more "Arcade" level, where strategy and planning are not required. The Combat Simulators are also better suited to younger children.

Tactical Command is much more challenging than simulation alone. It combines all the features of the three simulators with the elements of strategy, tactical manoeuvring, combat engagement and resupply. **You must demonstrate your skills as a field commander if you hope to receive any significant promotions.**

The TACC Screen
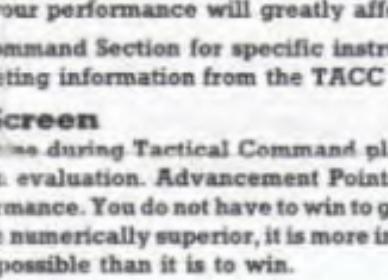
TACC stands for TActical Command Centre. This screen is where all decisions will be made regarding deployment of forces, troop engagement, resupply etc. The enemy forces will attempt to capture your Headquarters, and you will try to stop them. After moving your forces to engage the enemy, you can choose to sit and watch or you can join one of the battles and help your men to fight. If you choose to watch, you will surely lose, and the General will be very hard on you. If you choose to fight, your performance will greatly affect the outcome.

Refer to the Tactical Command Section for specific instructions on manoeuvring your forces and interpreting information from the TACC screen.

The Debriefing Screen

Upon completion of a game during Tactical Command play, you will come to the Debriefing Screen for an evaluation. Advancement Points are awarded based on your overall game performance. You do not have to win to get a good rating. Since the enemy will always be numerically superior, it is more important to reduce that superiority as much as possible than it is to win.

Your Performance Rating is related to your Advancement Points as shown below.

Performance Rating	Advancement Points
Outstanding	2200 or more
Superior	2000 to 2199
Exemplary	1800 to 1999
Commendable	1500 to 1799
Adequate	1200 to 1499
Inferior	900 to 1199
Awful	600 to 899
Pathetic	300 to 599
Disgusting	Less than 300

After a few seconds in TACC Debriefing you will meet with the General.

The General's Evaluation

Four Star General E. E. "Bud" Dink, is not an understanding person. He is quite unsympathetic and intolerable of new officers. You may find his remarks harsh at times, but underneath, he probably means every word of it. There is one hope, however. With enough perseverance you may someday become a Five Star General and out rank old General Dink. I wonder what he'd have to say then?

Press the **FIRE** button or **SPACEBAR** to continue.

OPERATING YOUR EQUIPMENT

Operating the M1A1 Abrams Main Battle Tank (MBT)
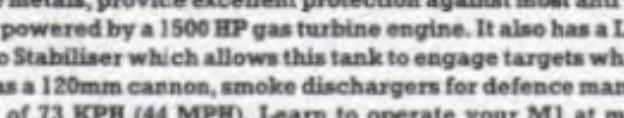

Description

Get ready to take the controls of an M1A1 Abrams, the U.S. Army's newest, most sophisticated main battle tank. The M1 features an unparalleled combination of mobility, armour protection and firepower. Its sloped armour, made of tough composite material, provide excellent protection against most anti tank warheads. The M1 is powered by a 1500 HP gas turbine engine. It also has a Laser rangefinder and a Gyro Stabiliser which allows this tank to engage targets while on the move. The M1 has a 120mm cannon, smoke dischargers for defence manoeuvring and a top speed of 73 KPH (44 MPH). Learn to operate your M1 at maximum efficiency and get to know all of its capabilities.

Objective

Your objective is to destroy as many enemy targets as you can while sustaining as few losses as possible. You will encounter enemy tanks, artillery, mortar fire and multi launch rocket systems.
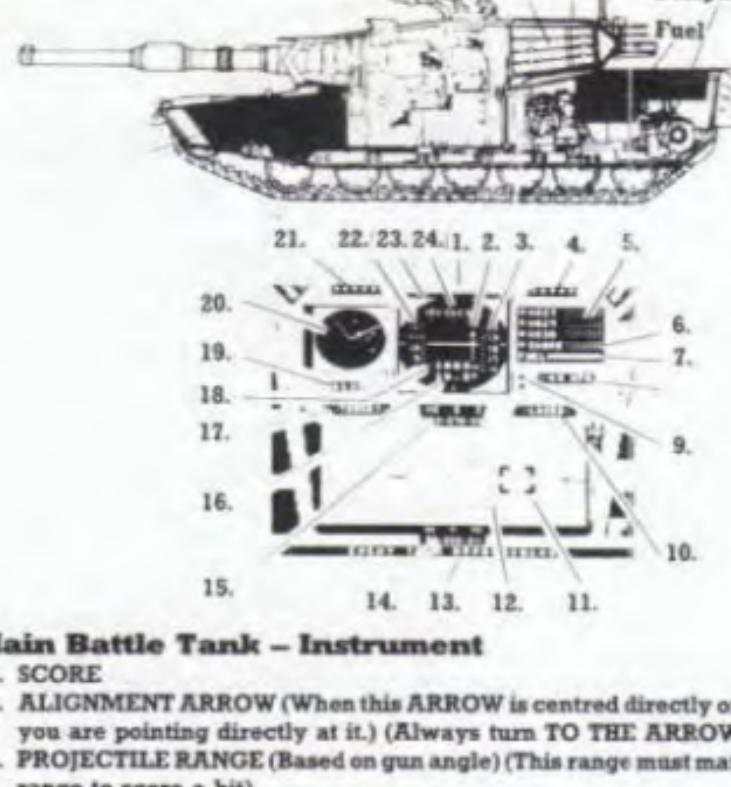
Main Battle Tank – Instrument

1. SCORE
2. ALIGNMENT ARROW (When this ARROW is centred directly on your target, you are pointing directly at it.) (Always turn TO THE ARROW)
3. PROJECTILE RANGE (Based on gun angle) (This range must match the target range to score a hit)
4. PLAYER STRENGTH
5. AMOUNT OF AMMUNITION REMAINING
   M827 – Only round that can destroy a tank.
   M829 – Standard combat.
   M830 – Standard combat.
6. AMOUNT OF SMOKE REMAINING
7. FUEL GAUGE
8. SPEED INDICATOR (Minus means reverse)
9. FORWARD/REVERSE INDICATOR (Blue means forward)
10. ENEMY LASER SCAN WARNING (Accompanied by an audible alarm)
11. TARGET CURSOR (Shows the position of the target)
12. MAIN VIEWING SCREEN
13. INFORMATION & MESSAGE DISPLAY
14. DRIVER'S HEADING (Direction the tank is pointing)
15. TURRET HEADING (The direction the 120 MM gun is pointing)
16. GUN ANGLE
17. TARGET ALERT (Accompanied by an Audible tone)
18. TARGET RANGE (Digital)
19. TARGET VECTOR (Heading to intercept)
20. THERMAL IMAGING SYSTEM
21. ENEMY STRENGTH
22. TARGET RANGE (Analog) (in 100 Metres)
23. PERISCOPE VIEW WITH LASER RANGEFINDER
24. TARGET VECTOR (Heading to intercept)

DESCRIPTION OF MBT INSTRUMENTS

Thermal Imaging Systems

The infra-red thermal imaging system produces an image by sensing the heat radiated by objects. The detected energy is converted into electrical signals and the images displayed are projected into the eye piece of the gunner's sight. The information is then sent to the laser rangefinder for targeting.

Laser Rangefinder

Information from the thermal imaging system is passed to the Laser Rangefinder, which automatically calculates the Target Vector (direction) and Target Range. The system is virtually instantaneous in operation and extremely accurate, making it possible to hit targets at long range and while on the move. The Laser Rangefinder eliminates any guesswork. The gunner simply turns the turret until he is pointing at the target. (The target is indicated on the main viewing screen by the TARGET CURSOR). Once the target is in approximate alignment, the gunner will then use the ALIGNMENT ARROW for fine adjustment. When the ARROW is centred on the target image, the gun is pointing directly at the target. The gunner then raises or lowers the gun angle until the PROJECTILE RANGE indicator matches the TARGET RANGE indicator (approximately) and fires.

Periscope View

An image of the target is automatically magnified and displayed in the periscope view, making it easily identifiable.

Score

Used in combat simulation to keep track of your combat points.

Player Strength

The number of tanks remaining in your unit.

Enemy Strength

Indicates the relative strength of the enemy division. This number does not always decrease when an enemy target is destroyed. It may take two or more kills to reduce the enemy's relative strength by one unit.

AMMUNITION

M827 – (APFSDS*-T)

This round is constructed of depleted uranium and is your most effective weapon against any type of armour. It is the ONLY round that will penetrate the armour of the enemy TR-80 tank.

M829 – (APFSDS*-T)

Standard armour piercing combat round.

M830 – (HEATMP-T)

Standard armour piercing combat round.

*Armour Piercing Fin Stabilising Discarding Sabot.

Enemy Laser Scan Warning

Your M1A1 is equipped with smoke screen capabilities to confuse enemy targeting systems. When the LASER SCAN WARNING alarm sounds, it means that your sensors have detected an enemy laser scan of your tank. You must dispense smoke immediately or the enemy targeting system will lock on to you and fire. If the enemy tank is able to score a direct hit, your tank will be destroyed.

MAIN BATTLE TANK CONTROLS – C64, ATST, AMIGA

FORWARD	TAB
REVERSE	CONTROL
EXIT THIS SCENE	ESCAPE
STOP	SPACE BAR
ROTATE TURRET ONLY	<>
18 KPH	1
36 KPH	2
54 KPH	3
72 KPH	4
CHANGE TARGETS	+/- (C64 ONLY)
SOLID FILL ON/OFF	INST DEL (C64 ONLY)
SOLID FILL ON/OFF	DELETE (AMIGA ONLY)
SOLID FILL ON/OFF	HELP (ATST ONLY)
SHELLS/USE M827'S	F1
USE M829's	F2 (F3 on C64)
USE M830's	F3 (F5 on C64)
GENERATE SMOKE	F4 (F7 on C64)
CHANGE BETWEEN GUNNER'S AND DRIVE VIEW	SHIFT

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                    Forward – Lower Gun Angle

            Left                        Right

Left/Fire – Turn Tank to left.  ─────────→  Right/Fire – Turn Tank to right.

                    Back – Raise Gun Angle
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SPECTRUM

Keys

Q	Up
A	Down
O	Left
P	Right
M, SPACE	Fire/Select
X	Pause Sub-Game
Q	Quit when paused

Joysticks: Kempston and Cursor. Joystick compatible.

Sinclair 1/2 replace directons

AMSTRAD

Keys

Q	Up
A	Down
O	Left
P	Right
SPACE	Fire/Select
ESC	Pause Sub-Game
Q	Quit when paused

Joystick – Joystick replaces directions.

Additional keys for Spectrum.

In addition:-

TACCOM

Z,X,C,V	Select player unit
E	Enter Sub-Game

MBT

Q	Gun barrel down
A	Gun Barrel up
W	Accelerate
S	Decelerate
E	Select weapon
D	Smoke

ADAT

SPACE	Fire missile

USING THE LASER RANGEFINDER

Learn to rely on your Laser Rangefinder. It is the most powerful offensive feature of your M1. Follow these steps while refering to the INSTRUMENT DIAGRAM.

1. Turn your tank (if necessary) to bring a target into view on the PERISCOPE.
2. While looking at the MAIN VIEWING SCREEN. Turn your tank left or right (by using the joystick) until your gun barrel is pointing almost directly at the TARGET CURSOR.
3. Now look at the periscope and notice the location of the ALIGNMENT ARROW.
4. Turn towards the ARROW until it is centred on the target image. YOU ARE NOW IN HORIZONTAL ALIGNMENT.
5. Next, look at the TARGET RANGE (the left set of vertical numbers).
6. Now, raise or lower your gun angle until your PROJECTILE RANGE matches (nearly) the TARGET RANGE. (The projectile range is the right set of vertical numbers). YOU ARE NOW IN RANGE ALIGNMENT.
7. If you are still in horizontal alignment, you should fire your cannon by pressing the FIRE button.

KEEP MOVING!

Your tank is covered with reactive armour, which bolts on the outside of your tank's body and turret. It explodes outward to blunt the impact of incoming shells. This allows you to take a number of hits without being disabled. If you're stationary, however, your chance of being hit in a spot that has been previously hit increases and makes you much more vulnerable.

## OPERATING THE AIR DEFENCE ANTI-TANK (ADAT) SYSTEM

Description
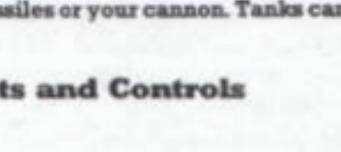
This unit is a highly sophisticated, modular missile launcher designed specifically to be an anti-aircraft/anti-tank weapon. The main component of the system is the turret based launch platform consisting of two banks of four laser beam riding missiles. The unit also features a 30mm cannon for additional firepower. The ADAT system was designed by Martin Marietta Corporation to provide effective anti-aircraft and anti-armour capabilities in a fast reaction vehicle for front line NATO forces. It is mounted on an M-41 Bradley Chassis with a top speed of 41 mph.

Objective

Your objective is to destroy enemy "MIG" fighters and TR-80 tanks. Aircraft can be destroyed by your missiles or your cannon. Tanks can only be destroyed by the 30mm cannon.

ADAT Instruments and Controls

LASER LOCK INDICATOR

CROSS-HAIR (30MM CANNON) (MOVE JOYSTICK)

ENEMY STRENGTH (Relative)

FUEL GAUGE

RADAR

PLAYER STRENGTH
MISSILES
SHELLS
SCORE

30 MM CANNON (PRESS BUTTON TO FIRE)

MISSILE LAUNCHER (PRESS "SPACE" TO FIRE)

DESCRIPTION OF ADAT INSTRUMENTS & CONTROLS

Laser Lock Indicator

When this square bracket appears on screen, it means that your target acquisition system is tracking a target. Fire a missile by pressing the **SPACE BAR** (RIGHT MOUSE BUTTON). Your laser tracking system is approximately 90% effective.

Cross-Hair

This is the 'gun-sight' for your 30mm cannon. Move the cross-hair vertically by pressing forward or back on the stick and move it horizontally by pressing left or right on the stick. Press the **FIRE** button to fire (ATARI ST/AMIGA – use the mouse to position cross hair, left mouse button to fire).

Fuel

During combat simulation, fuel is unlimited. However, during TACTICAL COMMAND play, fuel is consumed. If you run out of fuel, you cannot move your ADAT unit. Always keep enough fuel to get back to headquarters and resupply if needed.

## OPERATING THE FAST ATTACK VEHICLE (FAV)
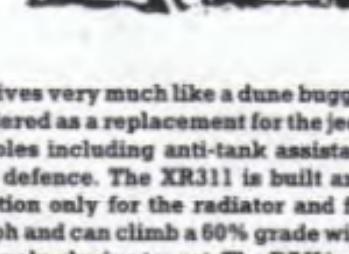
Description

The XR311 looks and drives very much like a dune buggy. Developed by the FMC Corporation, it is considered as a replacement for the jeep and has been designed for a wide variety of roles including anti-tank assistance, reconnaisance, convoy escort and forward air defence. The XR311 is built around a tubular steel frame and has armour protection only for the radiator and fuel tank. However, it has a top speed of near 100 mph and can climb a 60% grade without losing against. These factors make it an extremely elusive target. The FAV is armed with a TOW missile launcher which makes it very effective against any class of armoured vehicle.

Objective

To score points, you must destroy enemy obstructions and equipment.

In the combat simulation you'll be given 10 vehicles and an unlimited supply of fuel and ammunition. Most objects on screen are potential targets and are worth points. In the TACTICAL COMMAND section, your fuel and ammunition will eventually run out and you'll need to resupply.

FAV INSTRUMENTS & CONTROLS

ENEMY STRENGTH   FUEL   SHELLS OR MISSILES

PLAYER STRENGTH

SCORE

PUSH THE BUTTON TO FIRE

MOVE YOUR JOYSTICK LEFT OR RIGHT TO TURN THE FAV
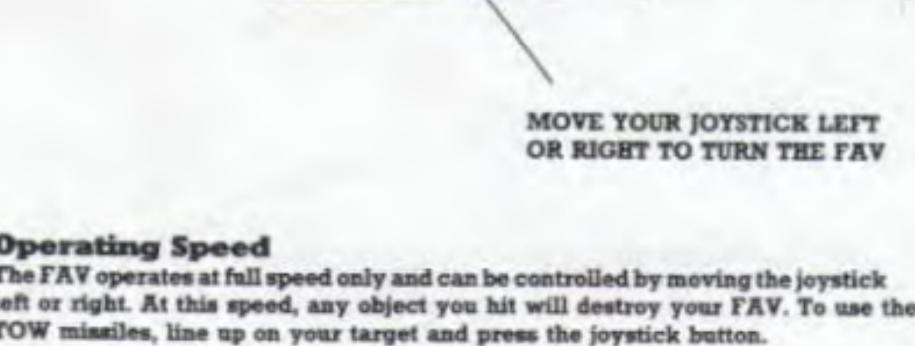
Operating Speed

The FAV operates at full speed only and can be controlled by moving the joystick left or right. At this speed, any object you hit will destroy your FAV. To use the TOW missiles, line up on your target and press the joystick button.

Hazards

Aside from avoiding hazards in your path, helicopters and tanks will fire at you. If you hear the whistle of an incoming artillery shell, move your FAV a considerable distance either left or right until the shell hits the ground. The FAV scene features 99 different defence levels which become progressively more difficult.

TACTICAL COMMAND

Overview and Summary

TACTICAL COMMAND is your chance to advance in rank. This is actual field command, where your ability as a field commander will be judged.

When you select the TACTICAL COMMAND option, you will move to the TActical Command Centre (TACC). Here you will deploy your forces, engage the enemy, fall back to resupply and hopefully defend your Headquarters against the numerically superior enemy forces.

You'll begin play with one unit each of TANKS, ADATS & FAVS. The computer will determine the number of vehicles in each unit. In addition to these 3 predefined units, you will have a fourth group, called the SUPPORT UNIT. You must designate which type of vehicle to be used and the computer will determine the number.

Your primary objective is to stop the enemy from overtaking your headquarters. Your secondary objective is to weaken enemy forces as much as possible. Each time the simulation is played the size of your forces, positioning and enemy strength will be different. Many times the overall enemy strength will be so overwhelming that achievement of your primary objective may not be possible. Therefore, your overall performance will be judged heavily on how much damage your units inflict on the enemy, in relation to the damage they do to you.

As enemy forces move toward your headquarters, you must cut them off. When your troops engage the enemy you can choose to do the fighting yourself, or let the computer decide the outcome. If the computer is doing the fighting however, it will base its decisions on the strengths of the player and enemy divisions. So if you're outnumbered, you'll probably lose your unit after a period of time.

As the field commander, you are responsible for monitoring each unit's fuel, ammunition and battle progress. From time to time you should check their supplies and fuel status. If you're running low, you may need to send them back to Headquarters (HQ) to resupply. This can be done if they have enough fuel to reach HQ and HQ is under your control.

To win, you'll have to carefully co-ordinate your smaller forces in battle, resupply them and do most of the critical fighting yourself. During combat you'll have to check the TACC (Tactical Command Centre) periodically to monitor the situation and needs of your other units.

When the game ends (whether you win or lose) you'll move to the DEBRIEFING room. Here your performance will be rated and advancement points awarded.

OPERATING THE TACTICAL COMMAND CENTRE (TACC)

Upon entering the TACC, the first thing you must do is designate your SUPPORT UNIT by pressing **T, A or F** for TANKS, ADATS or FAVS.

As soon as you have done this, the game will begin, so you may want to read the next few pages thoroughly before starting.

SUPPORT UNIT (Orange/yellow) (9 Vehicles)

HEADQUARTERS

UNIT # & TYPE

GAME CLOCK

INITIAL CURRENT

PLAYER STRENGTH

ENEMY STRENGTH

ADVANTAGE (Minus means we're behind)

NUMBER OF VEHICLES

AMOUNT OF FUEL

FAV UNIT (Blue) (14 Vehicles)

ENEMY UNITS (Green with no TYPE designation)

NUMBER OF MISSILES (For the entire unit)

NUMBER OF SHELLS (For the entire unit)

STATUS

PAUSE GAME

LOAD PREVIOUSLY SAVED GAME

SAVE GAME IN PROGRESS

QUIT (Return to personnel file)

CURSOR

ADAT UNIT (Blue) (12 Vehicles)

TANK UNIT (Blue) (9 Vehicles)

TACC CONTROLS

The Cursor
Many of the controls and commands involve moving the CURSOR to various locations on screen. This is done by moving the joystick up, down, left or right in the direction you wish to move.

Giving Orders
To give orders or commands to one of your units you must do the following:

STEP 1

Establish Communications with the Desired Unit
This is done by pressing keys 1, 2, 3 or 4 on the keyboard.
Key "1" – FAV Unit (Blue)
Key "2" – TANK Unit (Blue)
Key "3" – ADAT Unit (Blue)
Key "4" – SUPPORT Unit (Orange/yellow)

You may also use the joystick to move the CURSOR over the desired unit and then press the FIRE button. Make sure the cross (+) is within the CURSOR BOX.

Once communications have been established, the DESIGNATED UNIT WILL TURN WHITE and the UNIT INFORMATION SECTION (lower left) will show data for that unit.

STEP 2

Tell Your Unit What To Do
The COMMAND WINDOW (upper left) will now display the following options:

RESUPPLY Fall back to HQ and get more fuel and ammunition. (You cannot get more vehicles.) Once resupplied, the unit will remain at HQ until new orders are received. If the HQ is under enemy control it will turn green. **You cannot resupply when the enemy has control of your HQ.**

If you select RESUPPLY and HQ is under your control, your unit will automatically disengage (if necessary) and begin moving towards HQ. IF HQ IS CONTROLLED BY THE ENEMY YOUR RESUPPLY ORDER WILL NOT BE ACCEPTED.

MOVE Move to a new position and await further orders.

If you select MOVE you will then have to specify the POINT TO MOVE TO. Do so by moving the CURSOR (with the JOYSTICK) to the desired location and pressing the FIRE button.

ENGAGE Move to intercept an enemy division and engage them in battle. Once engaged, your unit will continue to battle until it wins or loses or until new orders are received. The computer will do the fighting for you unless you choose to ENTER COMBAT (see below).

If you select ENGAGE you will have to specify WHICH ENEMY UNIT TO ENGAGE. Do so by moving the CURSOR (with the joystick) to the desired enemy unit and pressing the FIRE button. Make sure the cross (+) is within the CURSOR BOX before pressing the button.

CANCEL Never mind. Do not give an order.

SELECT one of the options by moving the JOYSTICK UP or DOWN until the ARROW is pointing at the desired OPTION, then press the FIRE button.

ENTERING COMBAT
To have any chance of doing well, you must join your troops in combat. The computer will fight in your absence, but will only 'HOLD ITS OWN' against the enemy. One of your greatest challenges will be selecting which unit to help, since you can only be one place at a time. **Note: You can only enter Combat when a unit is 'in battle'.**

To ENTER COMBAT press the communication key (1, 2, 3 or 4) for the appropriate unit, then press the E key (for ENTER).

Fight as long as you feel it necessary, then press the RUN/STOP (ESC) key to return to the TACC.

UNIT INFORMATION
The unit information display (lower left) always shows data for the last unit selected by one of the communication keys (1, 2, 3 or 4). You can cycle through all four units and check their status simply by pressing the com keys in succession (1, 2, 3 or 4).

After you've checked everyone's status, you will still be in command mode (giving orders). If you do not wish to give a command (i.e. Resupply, Move, Engage) you can cancel by pressing the C key or the FIRE button.

OPTIONS
In the lower right corner of the TACC screen are four options: PAUSE, LOAD, SAVE and QUIT.

To select an option, move the CURSOR near the option you desire. The CURSOR will change to an ARROW. Now, position the ARROW over the BULLET (diamond) that is just to the left of the option you want, then press the FIRE button. Below is a description of each option.

PAUSE Will pause a game so you can catch your breath.

LOAD Will load a previously saved game into memory and begin play. To load a game, first select the LOAD OPTION. Now select a game number (1-10) by moving the joystick up or down until the desired number is displayed, then press the FIRE button.

SAVE Will save a game in progress so that you may restart play at a later time. To save a game, first select the SAVE OPTION. Now select a game number (1-10) by moving the joystick up or down until the desired number is displayed, then press the FIRE button. Up to 10 games are allowed on one disk.

QUIT Will abort the entire game and return you to the PERSONNEL FILE. (See the Game Flow Chart.)

TACC PLAYING SUGGESTIONS
When the game begins, enemy forces (green) will begin moving towards your Headquarters.

Select one of your units (press 1, 2, 3 or 4) and tell them to ENGAGE (see Giving Orders) one of the enemy divisions. Do the same for two other units so that all 3 enemy divisions are stopped and fighting. Now select your 4th unit and "Gang Up" on one of the enemies. Try to pick a battle where the sum of your two unit strengths is approximately equal to the enemy's strength. Let the computer fight this battle while you ENTER COMBAT with one of your 'one on one' units. To ENTER select the unit by pressing 1, 2, 3 or 4 then press the E key. Help out as long as you dare and then press the RUN/STOP (ESC) key to come back and see how everyone's doing.

If enemy forces penetrate your defences and reach HQ without being attacked the HQ will turn from yellow to green and the enemy will have temporary control. **If you don't attack the enemy division holding your HQ in a certain length of time, the entire battle will be over.** Once HQ is under enemy control you must engage the enemy division holding HQ in order to get control back. As long as HQ is under enemy control your forces cannot resupply.

Remember, if you do not engage the enemy division holding your HQ within a certain period of time the game will end. If 2 or 3 units attack your HQ, the 'holding time' will be even shorter, so it is imperative that you attack Divisions holding your HQ.

Be aware of the speed difference between the three types of units. The FAVs are the fastest, followed by the TANKS and then the ADATs. Take this into account when sending a unit to engage an enemy.

If one of your units is destroyed or runs out of fuel, it will turn grey and is of no further use to you.

The best way to learn how to be a good commander is to play the game. Don't get discouraged if you don't win. Concentrate on reducing the enemy's advantage. Your ratings will be based on how well you perform, rather than whether you win or lose. It takes experience to learn where to deploy your forces, when to return from combat, when to resupply, etc. Remember, even George Patton had to start somewhere.

HELPFUL HINTS

1. Keep moving during the MBT scene. If your tank is stationary, it is an easy target.

2. During the FAV scene, try to shoot the larger objects and equipment. They are worth more points and have a greater influence on enemy strength.

3. Enemy tanks in the MBT scene will come towards you, fire and then move away. The best way to destroy them is to wait until they start to move away, and then pursue them at full speed. The distance between you and the enemy tank will stabilise making it easier to hit. Don't forget to use your SMOKE when they are close and trying to get a Laser lock on your tank.

4. Upon returning to the TACC scene from combat, check the status of all your units (press 1, 2, 3 or 4). You may find that a unit is in urgent need of resupply.

5. Take the time to shoot the enemy tanks in the ADAT scene. They are worth big points and will reduce the enemy strength significantly. It takes two good solid hits with the 30mm cannon to destroy one.

6. Don't forget to move sideways when you hear an incoming shell in the FAV scene. Enemy mortars are deadly if you stay on a straight course.

BEACH HEAD™

PLEASE NOTE: Beach Head is only available on CBM 64/128, Spectrum and Amstrad formats only.

SCENARIO

A challenging naval battle followed by an invasion with land forces. If your troops succeed... penetrating the island defences, the most difficult challenge still remains... capturing the enemy fortress KUHN-LIN.

CONTROLS

CBM 64/128

Joystick only.

Spectrum 48/128

The menu screen displays four status boxes; one for the present number of players, one for the skill level, one displaying whether keyboard or joystick is selected, and finally, the largest box which displays the current keyboard selection for movement, fire, etc. Further to this is a list of keys to press which perform various functions.

S to start

I to go to the instructions pages.

P to change the number of players. (This is a toggle putting 1 to 2 or 2 to 1.)

L to change skill level (this loops through "easy", "fair" and "hard").

K to define the game keys; you are asked to press your key selections with the option to reselect should you make an error.

J to make a joystick selection (keep pressing to loop through selections.)

If the machine is loaded and left unattended the game will self-demonstrate.

Amstrad CPC

Beach Head will operate either by the keyboard or an Amstrad compatible joystick. If a joystick is connected to the computer press the **FIRE BUTTON** and the computer will automatically respond to joystick mode. If you wish to use the keyboard controls press the **SPACE BAR**. The key controls will then be as follows:

Q – Up, **A** – Down, **O** – Left, **P** – Right, **SPACE BAR** – Fire.

GAME PLAY

SEQUENCE I – AERIAL RECONNAISSANCE

The opening sequence is an aerial reconnaissance overview of enemy held territory. At this point your first command strategy decision must be made.

Choices

You can choose between two strategies.

1. Take your fleet through the hidden passages. The advantages to this strategy are:

   (a) Catch the enemy off guard and unprepared. His airpower and naval forces will not be as strong.

   (b) Your overall point total will be increased if you are successful in navigating the passage.

2. Take the enemy head-on and go straight into battle. The advantage to this strategy is:

   (a) Your fleet will not have to navigate the perilous hidden passage. The passage is extremely difficult to navigate because it is mined and torpedoes are launched at random throughout the channel.

Note: If you select the skill level for two players, the strategy for player one will be the same for player two.

To manoeuvre your fleet, move in the direction you wish to travel. Once moving, your fleet will continue in that direction.

If you choose a frontal attack, proceed directly through the main channel and engage the enemy.

If you choose to navigate the hidden passage:-

C64/Amstrad

Manoeuvre your fleet close to shore along the outer edge of the peninsula. When you have found the passage, the general quarters alarm will sound

Spectrum

The hidden passage is shown by the flashing square in the top left. Kuhn-Lin base is shown by the flashing square in the bottom left and the enemy fleet by the four dots in a square formation.

SEQUENCE II – THE HIDDEN PASSAGE

In this scene you will have to cross through a mined channel and avoid being struck by torpedoes fired by the automated defence system. To manoeuvre your ship, push LEFT on the stick to turn left, RIGHT to turn right, FORWARD to speed up and BACK to stop. Head for the opening directly across from the starting point.

(Spectrum Users note that: When a ship has passed through safely it is displayed in blue on the status lines.)

Once you leave the passage you will be in a position to surprise the enemy and catch them in their harbour. Move swiftly to engage the enemy.

SEQUENCE III – GENERAL QUARTERS

Fighters at Twelve O'clock

Enemy fighter squadrons are now attacking your fleet! If you have surprised the enemy, many of your aircraft are below deck and will be unable to respond to the attack. If you choose strategy two, the number of aircraft attacking your ships is considerably greater.

Use your joystick to aim your anti-aircraft guns and shoot down enemy planes. Pull BACK to raise or push FORWARD to lower your guns. Press the button to fire. Your ammunition will not run out, but it does take a certain amount of time to replenish. Do not waste shells or you will not be able to fire rapidly at a critical time.

For each hit you receive the damage rating will increase by one. When the damage rating reaches a certain level you will lose a ship – the figure at which this occurs is dependent on the skill level!

Enemy aircraft occasionally fly by to report the battle progress back to the island. If you destroy these planes it will add 2,000 points to your score.

If you survive the onslaught of the enemy aircraft, the naval battle begins.

SEQUENCE IV – BATTLE STATIONS

Once enemy aircraft have been neutralized, the enemy battleships and cruisers will begin shelling your fleet. The joystick is now used to fire your heavy guns to sink the enemy ships. Again, as in the previous scene, if you have surprised the enemy and caught them out of position, it will take them longer to zero in on your fleet.

TO CONTROL YOUR GUNS

Move and fire as in GENERAL QUARTERS. Use the Degree of Elevation to estimate the distance (an 1° change in elevation represents 200 metres in distance).

Enemy ships are more accurate if you have attacked the fleet head-on. For each hit taken you lose a ship.

BONUS POINTS

The enemy aircraft carrier will attempt to escape. If you sink the carrier, it will add 10,000 points to your score.

After the naval battle, you must manoeuvre your remaining ships into the enemy harbour. Since there is only room for four ships in the harbour, you will be awarded 2,000 points for each extra ship.

SEQUENCE V – BEACH HEAD!

Each ship that you navigate into the harbour carries two tanks. After your tanks have landed and your beach head is established, the battle for the island defence systems to get to the fortress of Kuhn-Lin. Once your tanks start forward there is no turning back! Tanks have side to side mobility but will continue forward at a constant speed. There are numerous obstacles in your way, including mines, anti-tank guns, enemy tanks, bunkers, etc. At this point the enemy is prepared and is throwing all his defence against your tanks to stop them. Each enemy defence system is worth a certain number of points, and their value is displayed when they are destroyed. Each time a tank succeeds in reaching Kuhn-Lin, the difficulty increases for the next tank. It will take you several tanks to finally destroy the fortress.

SEQUENCE VI – THE FINAL BATTLE

Once a tank has reached Kuhn-Lin, you will land 10 shells in the fortress to destroy it. There are ten targets to hit, but only one is vulnerable at a time. The vulnerable target will turn white. As each white target is hit another will appear until all ten have been destroyed in sequence.

The fortress is defended by a huge cannon. Once this cannon has sighted you, it will get your range and fire. The final battle will require a task force of tanks to win. If you are successful in destroying the Fortress, the enemy surrenders and victory is yours!

SCORING

Even if you destroy the fortress Beach Head allows you to compete for high scores. Game scoring is as follows:

Ships navigated safely through passage	3,000 ea.
Airplanes	400 ea.
Reconnaissance Plane	2,000 ea.
Carrier	10,000
Other Ships	2,000 ea.
Enemy Tank	1,000 ea.
Machine Gun	400 ea.
Bunkers	800 ea.
Towers	600 ea.
Targets	2,000 ea.
Kuhn-Lin Destroyed	20,000
Extra Ships (over 4)	2,000 ea.

ADDITIONAL FEATURES (CBM 64/128 ONLY)

Adjusting the Sound: Beach Head is designed to have the highest quality sound possible. Because some Commodore 64's have different low pass filters, it may be necessary to adjust the game's filter settings to provide the optimum quality on your machine. You can change the settings by typing an F during the level selection screen. The test sound is the anti-aircraft gun firing. Adjust this level as you desire. As you exit the routine you will have the opportunity to save the settings to disk to make them permanent.

Adjusting the Border Colour: To change the border colour to suit your own taste, type B during the level selection screen.

Top 10 Display: During the level selection, if you touch the T key, you can view the top ten scores and save them.

PAUSE FEATURE To stop all action and "Freeze" the game, simply press the COMMODORE key. To continue press the same key again.

ABORT FEATURE If you find yourself out-classed and wish to cancel the game, you may return to the 'Select Level' screen by pressing the CTRL key.

AUTOMATIC DEMO If left unattended for approximately one minute, the computer will take over and play the game by itself. You may take control at any time by simply moving the stick.

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